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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/629,802 | 07/30/2003 | Akira Nagashima | 03500.015658.2 | 7925 |
| 5514 | 7590 | 08/20/2004 | EXAMINER | |
| FITZPATRICK CELLA HARPER & SCINTO | | | SHAH, MANISH S | |
| 30 ROCKEFELLER PLAZA | | | ART UNIT | |
| NEW YORK, NY 10112 | | | PAPER NUMBER | |
| | | | 2853 | |

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,802

Applicant(s)

NAGASHIMA ET AL.

Examiner

Manish S. Shah

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-84 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 49-64, 68-77 and 81-84 is/are rejected.
- 7) ☒ Claim(s) 65-67 and 78-80 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/923,417.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>07/30/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 49-53 & 82-83 are rejected under 35 U.S.C. 102(e) as being anticipated by Bauer et al. (# US 6176908).

Bauer et al. discloses an inkjet recording process, including the step of ejecting the ink from the orifice in response to recording signal (column: 4, line: 25-36; column: 10, line: 55-67), wherein the ink including a first (organic solvent) (column: 2, line: 47-67) and a second organic compound (surfactant) (column: 4, line: 1-10), which is incompatible with each other; at least one compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties (column: 3, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 3, line: 24-65). They also disclose that the step includes a sub step of applying thermal energy to the ink (column: 4, line: 30-36).

2. Claim 84 is rejected under 35 U.S.C. 102(e) as being anticipated by Auslander et al. (# US 5681381).

Auslander et al. discloses a method of elongating the life time of fluorescence of a fluorescent colored portion of a recorded article including a recording medium and a colored portion provided thereon, wherein the colored portion formed by an inkjet recording process, including the step of ejecting the ink from the orifice in response to recording signal (column: 6 line: 60-65), wherein the ink including a first (organic solvent) (column: 6, line: 50-60) and a second organic compound (surfactant) (column: 7, line: 35-50), which is incompatible with each other; a compound having a vapor pressure not lower than that of diethyleneglycol (column: 3, line: 60-67; column: 4, line: 1-10) at least one compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties (column: 7, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 7, line: 1-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 54-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tochiara et al. (# US 5485188) in view of Bauer et al. (# US 6176908).

Tochihara et al. discloses an ink jet recording apparatus (figure: 4) including a recording unit (figure: 6) and an ink cartridge (figure: 5), which comprises an ink container (element: 40, figure: 5) and a head portion for ejecting the ink (element: 71, figure: 6), the ink container containing ink including a first organic compound (column: 5, line: 40-58) and a second organic compound (nonionic surfactant) (column: 5, line: 1-10) and a liquid medium dissolving or dispersing the component (column: 5, line: 55-67). They also disclose that the head portion has a construction that thermal energy is applied to the ink to eject the ink (column: 8, line: 1-13); the ink container includes a polyolefin (column: 7, line: 54-56) and the ink holding unit includes a porous material or polyurethane or polyolefin (column: 7, line: 54-56). They also disclose that the ink holding member has a multi layer structure, wherein the direction of the multi layer arrangement of the multi-layer structure is aligned in an ink discharging direction of the ink container (figure: 1).

Tochihara et al. differ from the claim of the present invention in that the ink containing at least one compounds exhibiting fluorescents properties and a coloring material exhibiting fluorescence properties.

Bauer et al. teaches that to get the fluorescent image ink composition including a first (organic solvent) (column: 2, line: 47-67) and a second organic compound (surfactant) (column: 4, line: 1-10), which is incompatible with each other; at least one compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties (column: 3, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 3, line: 24-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Tochiara et al. by the aforementioned teaching of Bauer et al. in order to have a fluorescent and water fastness printed image.

Allowable Subject Matter

4. Claims 65-67 & 78-80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

(1) With respect to claims 65 & 78, the ink-holding member is composed of fiber flocculate.

(2) With respect to claims 66-67 & 79-80, which are depends on claims 65 and 78 respectively.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manish S. Shah
Examiner
Art Unit 2853


MSS
8/16/04